



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/588,464

08/04/2006

Yasuyuki Dewa

1033622-000023

6700

21839 7590 03/05/2010
BUCHANAN, INGERSOLL & ROONEY PC
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

WOOD, ELLEN S

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

03/05/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com
offserv@bipc.com

Office Action Summary	Application No. 10/588,464	Applicant(s) DEWA ET AL.	
	Examiner ELLEN S. WOOD	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 11-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 11-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 11-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirasawa (US 5,179,168).

In regards to claim 1, Hirasawa discloses an ionomer composition that consists of a blend comprising at least two ionomers (col. 2 lines 56-57). The blend comprises a 5-99 parts by weight of the ionomer composition and 95-1 parts by weight of a thermoplastic polymer (col. 2 lines 48-52). The ethylene/unsaturated carboxylic acid copolymers are at least partially neutralized with at least one alkali metal selected from the group consisting of potassium rubidium, and cesium (col. 2 lines 31-35). The ethylene/unsaturated carboxylic acids have an average acid content of 0.5 to 15 mole% (col. 2 lines 29-44). The difference of the unsaturated carboxylic acid content between ionomers is at least 2 mole% (col. 3 lines 36-41). The neutralization degree (ionization degree) by potassium is 62% or more (table 1 and table 2). A base monomer, such as an unsaturated carboxylic ester or a vinyl ester, can be included in an amount of up to about 20 mol% in the ionomer (col. 4 lines 34-37). The vinyl ester includes vinyl acetate and vinyl propionate (col. 3 lines 7-9).

In regards to claim 3, Hirasawa discloses that the thermoplastic polymer can be polyolefin resins (col. 6 lines 9-10).

In regards to claims 11-12, Hirasawa discloses can be a single layer (col. 5 lines 63-66).

In regards to claims 13-18, Hirasawa discloses a multi-layer article that can be formed with the ionomer composition and a thermoplastic resin, a paper sheet or a metal (col. 5 lines 63-68). The thermoplastic resin can be polyolefin resins (col. 6 lines 9-10).

In regards to claims 19-24, Hirasawa discloses that the ionomer composition can be used for a packaging film, a mat, a container, a wall paper sheet, a battery separator and the like (col. 5 lines 63-66).

Response to Arguments

3. Applicant's arguments filed 12/04/2009 have been fully considered but they are not persuasive.

4. The applicant argues that Hirasawa does not describe a resin composition containing an ethylene-unsaturated ester copolymer (B) and a thermoplastic resin resin (C) other than (A) and (B), as defined in present claim 1.

In response, Hirasawa discloses that a third ethylene/unsaturated carboxylic acid copolymer may be in the ionomer composition (col. 3 lines 66-68). The third ethylene/unsaturated carboxylic acid copolymer comprising a monomer of unsaturated carboxylic acid ester or vinyl ester (col. 4 lines 34-37). Thus, Hirasawa discloses an

ionomer composition that comprises two or more types of ethylene-unsaturated carboxylic acid copolymers and an additional ethylene-unsaturated ester copolymer.

5. The applicant argues that Hirasawa only exemplifies various types of thermoplastic polymers as one single polymer.

In response, the component (B) of the applicant's claim is the additional ethylene/unsaturated carboxylic acid copolymer with a unsaturated carboxylic acid ester monomer. The examiner does not suggest that component (B) was an additional thermoplastic polymer.

6. The applicant argues that Hirasawa does not disclose the improvements that the applicant's have discovered based on there claimed composition.

In response, It is well-settled that unsupported arguments are not a substitute for objective evidence. *In re Pearson*, 494 F.2d 1399, 1405, 181 USPQ 641, 646 (CCPA 1974).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 1794

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLEN S. WOOD whose telephone number is (571)270-3450. The examiner can normally be reached on M-F 730-5 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571)272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rena L. Dye/
Supervisory Patent Examiner, Art Unit 1794